In the specification:

Please amend the first complete paragraph on page 32 as follows:

The second case of an exon 15 change is an 18 year old woman who developed jaw cysts at age 9 and BCCs at age 6. The developmental effects together with the BCCs indicate that she has BCNS, although none of her relatives are known to have the syndrome. Her blood cell DNA has a deletion of 11 bp, removing the sequence ATATCCAGCAC (SEQ ID NO: 20) at nucleotides 2441 to 2452 of the coding sequence. In addition, nucleotide 2452 is changed from a T to an A. The deletion results in a frameshift that is predicted to truncate the protein after amino acid 813 with the addition of 9 amino acids. The predicted mutant protein is truncated after the seventh transmembrane domain. In Drosophila, a ptc protein that is truncated after the sixth transmembrane domain is inactive when ectopically expressed, in contrast to the full-length protein, suggesting that the human protein is inactivated by the exon 15 sequence change. The patient with this mutation is the first affected family member, since her parents, age 48 and 50, have neither BCCs nor other signs of the BCNS. DNA from both parents' genes have the normal nucleotide sequence for exon 15, indicating that the alteration in exon 15 arose in the same generation as did the BCNS phenotype. Hence her disease is the result of a new mutation. This sequence change is not detected in 84 control chromosomes.

Please amend the first complete paragraph on page 39 as follows:

Allele Loss Analysis. Microsatellites used for allelic loss analysis were D9S109, DpS119, D9S127, and D9S287 described in the CHLC human screening set (Research Genetics). A part of the ptc intron I sequence was tested for polymorphism in a control population and found to be polymorphic in 80% of the samples tested. This microsatellite was used for analysis of ptc gene allelic loss in bladder carcinomas. The primer sequences are as follows: forward primer, 5'-CTGAGCAGATTTCCCAGGTC-3' (SEQ ID NO: 21); and reverse primer, 5'-CCTCAGACAGACCTTTCCTC-3' (SEQ ID NO: 22). The PCR cycling for this newly isolated marker was 4 min. at 95 °C, followed by 30 cycles of 40 s at 95 °C, 2 min. at 60 °C, and 1 min. at 72 °C. PCR products were separated on 6% polyacrylamide gels and exposed to film.